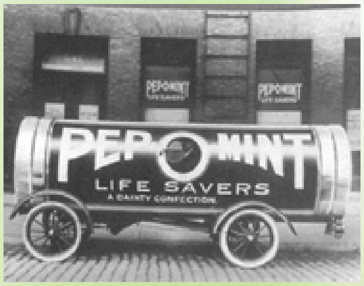
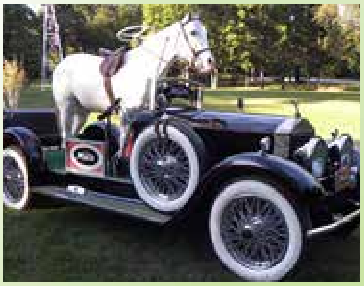
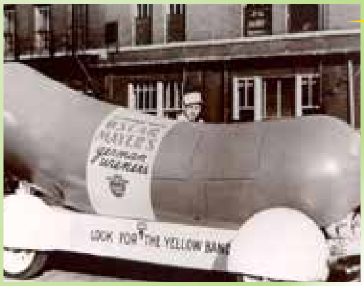
ANTIQUE AUTOMOBILE CLUB OF AMERICA
WHEELS
Spring 2014

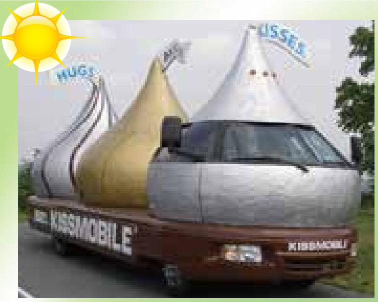
ADVERTISING ON WHEELS

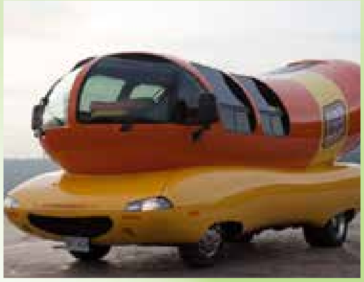
By: Matthew Hocker

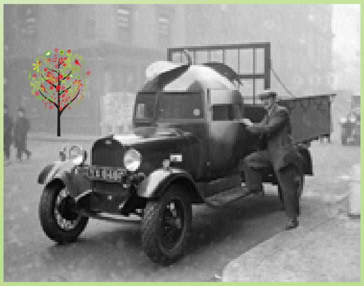

1918 Life Savers Pep-O-Mint Car

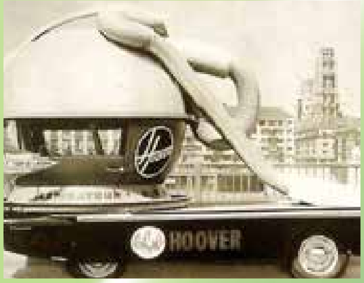

1935 Rolls-Royce Moxie Horsemobile

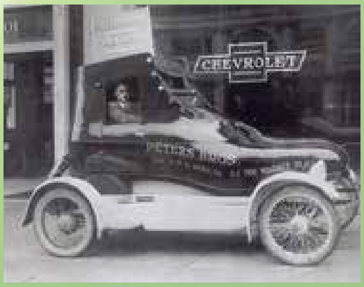

1936 Oscar-Mayer Wienermobile


1997 Hershey Kissmobile

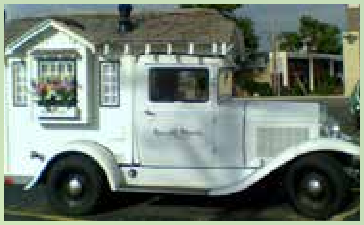

2014 Oscar-Mayer Wienermobile


Ford AA Apple Truck


Hoover Vacuum Car


Peters Bros. Shoe Car

When companies want to sell something to a lot of people, they need to advertise. For businesses, the goal of advertising is to make people interested in the products they sell. Some companies use strange looking cars or trucks to catch peoples' attention. They take normal cars and trucks and modify their bodies, which are usually designed to look like an item they sell. For example, hotdog maker Oscar-Mayer constructed their Wienermobile to look like a hotdog on a bun. The first version of this vehicle appeared in 1936, and Wienermobiles are still popular attractions today.


Russel Stover House Truck

One of the earliest advertising vehicles was the Horsemobile from a soda-pop company named Moxie. The first version of this car was built on a 1917 Dort chassis. A fake horse was placed on top of the car's body, and the steering wheel was mounted on the neck. Later versions of Horsemobiles appeared on top of car chassis from Buick, Cadillac, and even Rolls-Royce. If you're lucky, you might be able to see one of these at a car show!

Women Inventors and the Automobile

By: Angelica Yost

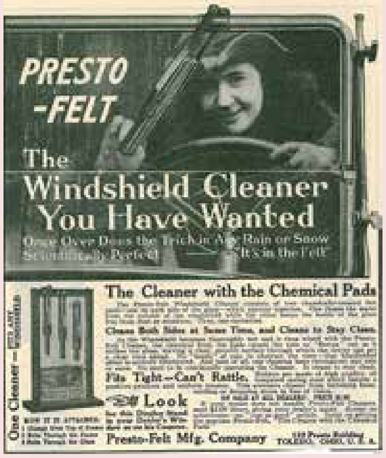
When you think of cars you may think of all the great men who helped create them like Henry Ford, Gottlieb Daimler, Karl Benz, Preston Tucker, or Rudolf Diesel. It's easy to forget that there were plenty of women who helped shape the automobile into what it is today. March is Women's History Month, so in celebration we're taking a look back at a few highly intelligent women whose inventions we couldn't have done without.

Margaret E. Knight (1838 – 1914)
Rotary Engine

Called "the most famous 19th century woman inventor," Knight held 87 patents (a patent is a way of protecting an invention from being stolen) in her lifetime. Between 1902 and 1914, she made several patents for rotatory engines and their components. A rotary engine is an early type of *internal combustion* engine, which is used in modern automobiles. Rotary engines used to be popular for planes, motorcycles, and some cars. However, they had many limitations and were eventually replaced by better, more efficient engine types. Due to Knight's many inventions, she was accepted into the National Inventors Hall of Fame in 2006.

Mary Anderson (1866 – 1953)
Windshield Wiper

Born in 1866, Anderson was a wealthy real estate developer (a person who builds buildings on a piece of land) and rancher. One day while Anderson was riding in a trolley, it started to sleet. There was so much ice coming down that the driver had to open the window to see the road as he had no way to clean the windshield. Anderson noticed the driver's problem and drew a picture of a windshield wiper right there on the trolley. With Anderson's wiper a driver could turn a lever on the inside of the car that would move a rubber blade across the outside of the windshield.



PRESTO -FELT

The Windshield Cleaner You Have Wanted

Once Over Does the Trick in Any Rain or Snow

Scientifically Perfect — "It's in the Felt"

The Cleaner with the Chemical Pads

Cleans Both Sides at Same Time, and Cleans to Stay Clean.

Fits Tight—Can't Rattle.

Look

Presto-Felt Mfg. Company

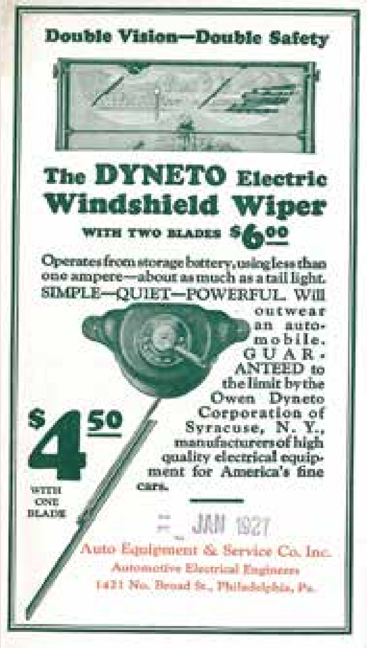
One Cleaner

An Early Hand-Operated Windshield Wiper

In 1903, Anderson patented her wiper and tried to sell her idea to a Canadian car company. The company rejected her idea thinking that wipers were not important enough! It wasn't until 1922 that Cadillac began to adopt windshield wipers as standard equipment on their cars. Although Anderson made no money for her invention, her idea helped to make driving a lot safer.

Charlotte Bridgwood (1861 – 1929)
Electric Windshield Wiper

Although Mary Anderson initially invented the windshield wiper, her invention was operated manually: in order to make the wiper blade move across the windshield, the driver would have to turn a



Double Vision—Double Safety

The DYNETO Electric Windshield Wiper

WITH TWO BLADES $6.00

Operates from storage battery, using less than one ampere—about as much as a tail light. SIMPLE—QUIET—POWERFUL. Will outwear an automobile. GUARANTEED to the limit by the Owen Dyneto Corporation of Syracuse, N. Y., manufacturers of high quality electrical equipment for America's fine cars.

$4.50 WITH ONE BLADE

JAN 1927

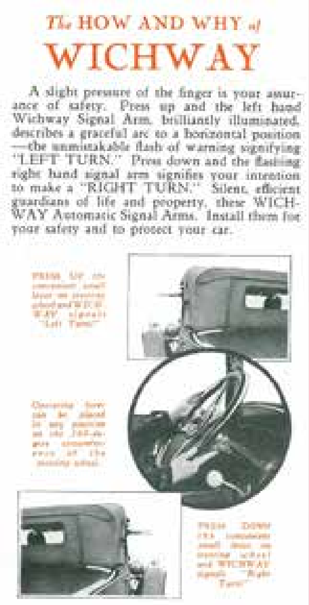
Auto Equipment & Service Co. Inc.
Automotive Electrical Engineers
1421 No. Broad St., Philadelphia, Pa.

An Early Electric Windshield Wiper

lever constantly. So in 1917, Charlotte Bridgwood, president of Bridgwood Manufacturing Company in New York, patented her idea for an "Electric Storm Windshield Cleaner." Because her wiper was operated by electricity, the driver would only have to turn the wiper on and it would automatically swish back and forth, just like the windshield wipers you find in modern cars.

Florence Lawrence (1866 – 1938)
Turn Signal & Brake Signal

Lawrence was actually Charlotte Bridgwood's daughter, but she changed her name and became a famous Canadian silent film actress. Though she is often called the "first real movie star," Lawrence was more than a pretty face; she was also an intelligent inventor like her mother. Lawrence invented an "auto signaling arm"—what we now call a *turn signal*—and a "full-stop signal" which showed when a car was stopping like the brake lights on modern cars. However, early cars did not have rear lights. Instead, Lawrence made it so a driver could push a button that would lift an arm on the car's fender to show others where the car was turning. To show that the car was stopping, the driver could press on the foot brake and it would raise or lower a sign. Thanks to Lawrence, by 1939 Buick was putting electric signals on its vehicles.



The HOW AND WHY of
WICHWAY

A slight pressure of the finger is your assurance of safety. Press up and the left hand Wichway Signal Arm, brilliantly illuminated, describes a graceful arc to a horizontal position—the unmistakable flash of warning signifying "LEFT TURN." Press down and the flashing right hand signal arm signifies your intention to make a "RIGHT TURN." Silent, efficient guardians of life and property, these WICHWAY Automatic Signal Arms. Install them for your safety and to protect your car.

An Early Turn Signal

Helen Blair Bartlett (1901 – 1969)
Spark Plug Insulation

Spark Plug

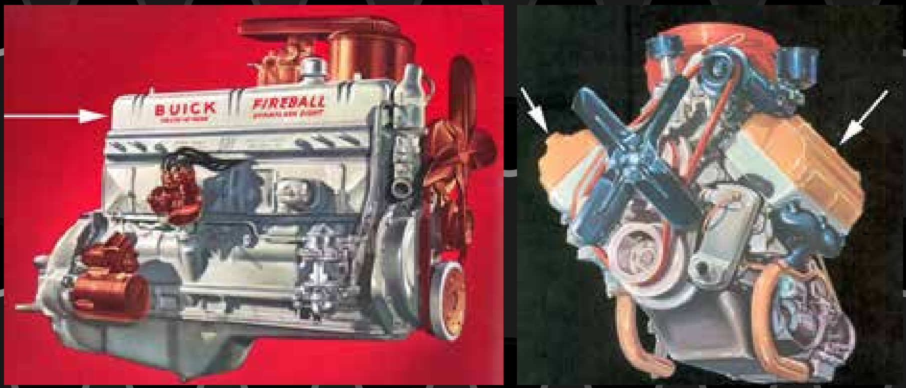
A geologist from Sharpsville, Pennsylvania, Bartlett was the first woman to achieve a top technical position at General Motors. Using her knowledge of minerals, Bartlett was able to develop new and improved ceramic insulations for spark plugs. A spark plug is responsible for delivering an electric current in an engine, so a good insulator is needed to prevent a short or even a fire. Bartlett is also well known for her contributions to the Manhattan Project which created the atomic bomb and ultimately ended World War II.

Stephanie Louise Kwolek (1923 – Present)
Kevlar

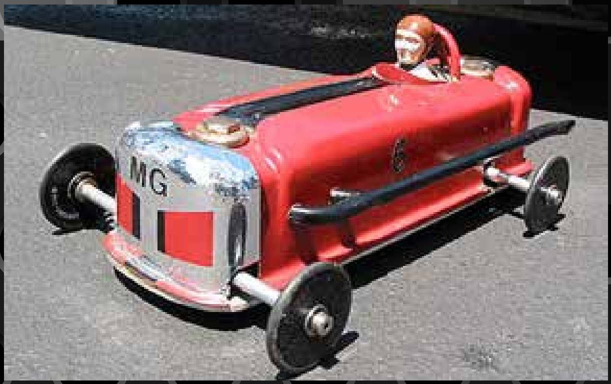
Kwolek is an American chemist and research scientist. In 1946, Kwolek went to work for the chemical company DuPont and set out to develop a lightweight but strong fiber for tires. She ended up inventing *poly-paraphenylene terephthalamide,* or Kevlar. Kevlar is five times stronger than steel and is now used to make all sorts of things like cable, frying pans, and body armor. Kwolek was added to the National Inventors Hall of Fame and the National Women's Hall of Fame, and she was awarded the National Medal of Technology.

OFF TO THE VALVE COVER RACES!

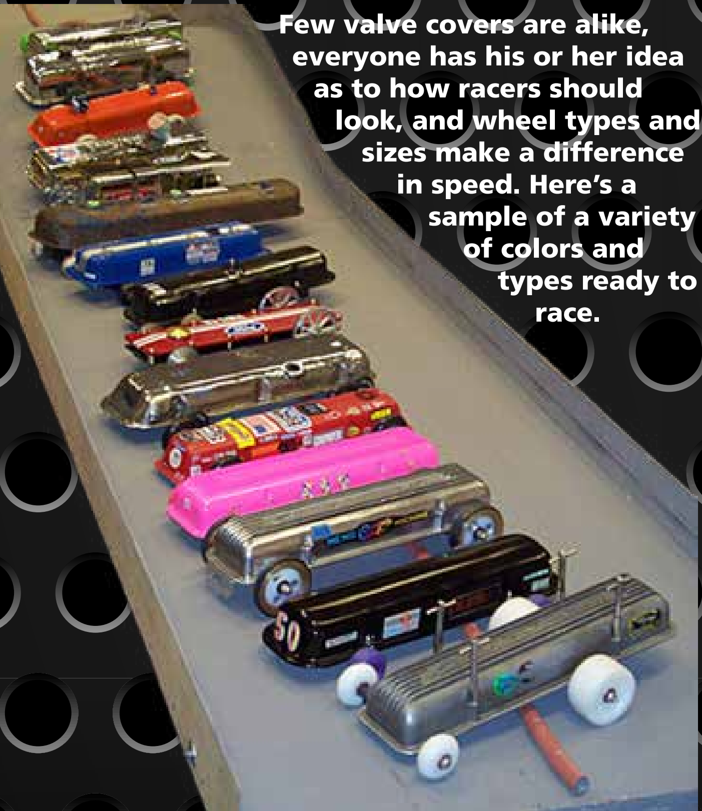
By: Warren H. Erb



Engine valve covers shaped like little bathtubs (arrows) are used to keep lubricating oil around the valve guides and rockers without splashing all over the place.



If four wheels were mounted on a valve cover, it would make a kind of little car. Many of them are very fancy, like this one, but it takes more than fancy looks to make one win in a race.



Few valve covers are alike, everyone has his or her idea as to how racers should look, and wheel types and sizes make a difference in speed. Here's a sample of a variety of colors and types ready to race.

In a race, two valve covers are placed at the top of a specially constructed, inclined track with identical, parallel lanes, which can be straight or curved.

The covers are released at the top of the incline at exactly the same time, using a gate. They coast down the incline side by side.

The first cover to cross a finish line at the bottom of the incline wins the race.

Engines have valves to let air and fuel into the cylinders, and other valves to let exhaust gas out. The guides and rockers that work these valves must be lubricated with oil. To keep oil flowing around them without splashing it all over the place, a pan called a valve cover, usually shaped like a little bath tub, is mounted over them.

People are always playing games and racing things. Someone must have seen used valve covers in the trash or lying around a workshop and got an idea - if four wheels were mounted on a valve cover, it would make a kind of little car. Maybe, if these little cars were coasted down a hill together, one beside the other, whoever could find the best valve cover for the job and mount the wheels in the best way would probably win.

The Pinewood Derby is a racing event for Cub Scouts. With the help of parents, scouts build their own cars from wood, usually from kits containing a block of pine, plastic wheels and metal axles. With the popularity of the Pinewood Derby, other organizations have developed similar events. Racing valve covers with wheels is one of them.

Valve cover racing is popular in many parts of the United States. Rules and regulations for the racers usually set maximum lengths, widths, heights and weights, as well as wheel sizes. Rules for tracks help insure that both racers get a fair and equal chance to win. Rules will change from one place to another, but the basics remain the same: Competitors must construct a vehicle using a valve cover from a car's engine. Usually it must have four wheels. It can be decorated or modified in many ways.

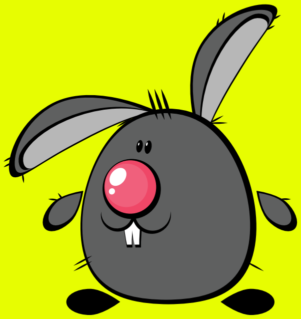
The valve cover cars are powered by gravity. In a race, two valve cover cars are placed at the top of a specially constructed, inclined track with identical, parallel lanes, which can be straight or curved. The cars are released at the top of the incline at exactly the same time, using a gate. They coast down the incline side by side. The first to cross the finish line at the bottom of the incline wins the race.

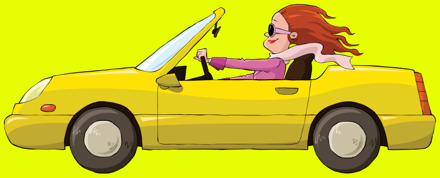
Valve cover racing is an event for both adults and children at car shows, and will be a very popular part of the 19th Annual Museum Car Show on Saturday, June 21, 2014 (8:00 am to 3:00 pm) sponsored by the AACA Museum in Hershey, PA. If you live near Hershey, you will certainly want to visit this show and get involved in valve cover racing there. You can get more information about this upcoming event on the museum's website: www.aacamuseum.org. If you live too far away, search the internet to locate your closest valve cover racing event - you'll find it to be a lot of fun!

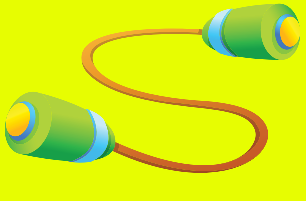
FIND THE PICTURES

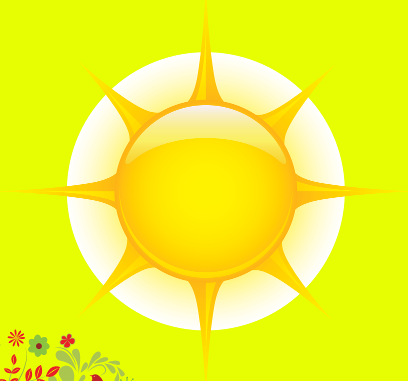
Can you find each of these pictures at another place in this newsletter?

The topic for this issue:
So Happy it's FINALLY Spring!









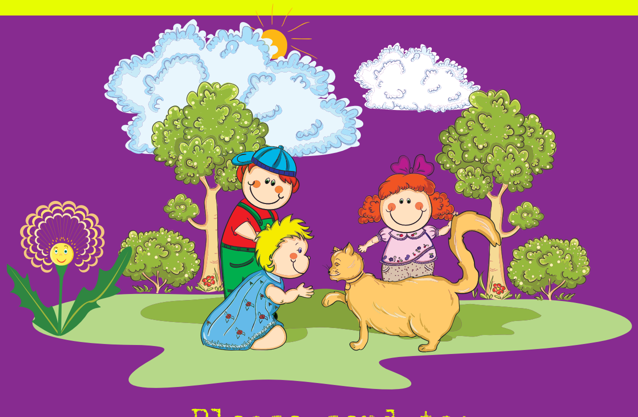
WHEELS

WORD SEARCH

Can you find all of the words hidden in the puzzle on the next page?

WE NEED...

SHORT ARTICLES, POEMS, PHOTOS, CROSSWORD PUZZLES AND WORD SEARCHES FROM OUR JUNIOR MEMBERS.



Please send to:
Chris Ritter
AACA Library & Research Center
501 West Governor Road
Hershey, PA 17033

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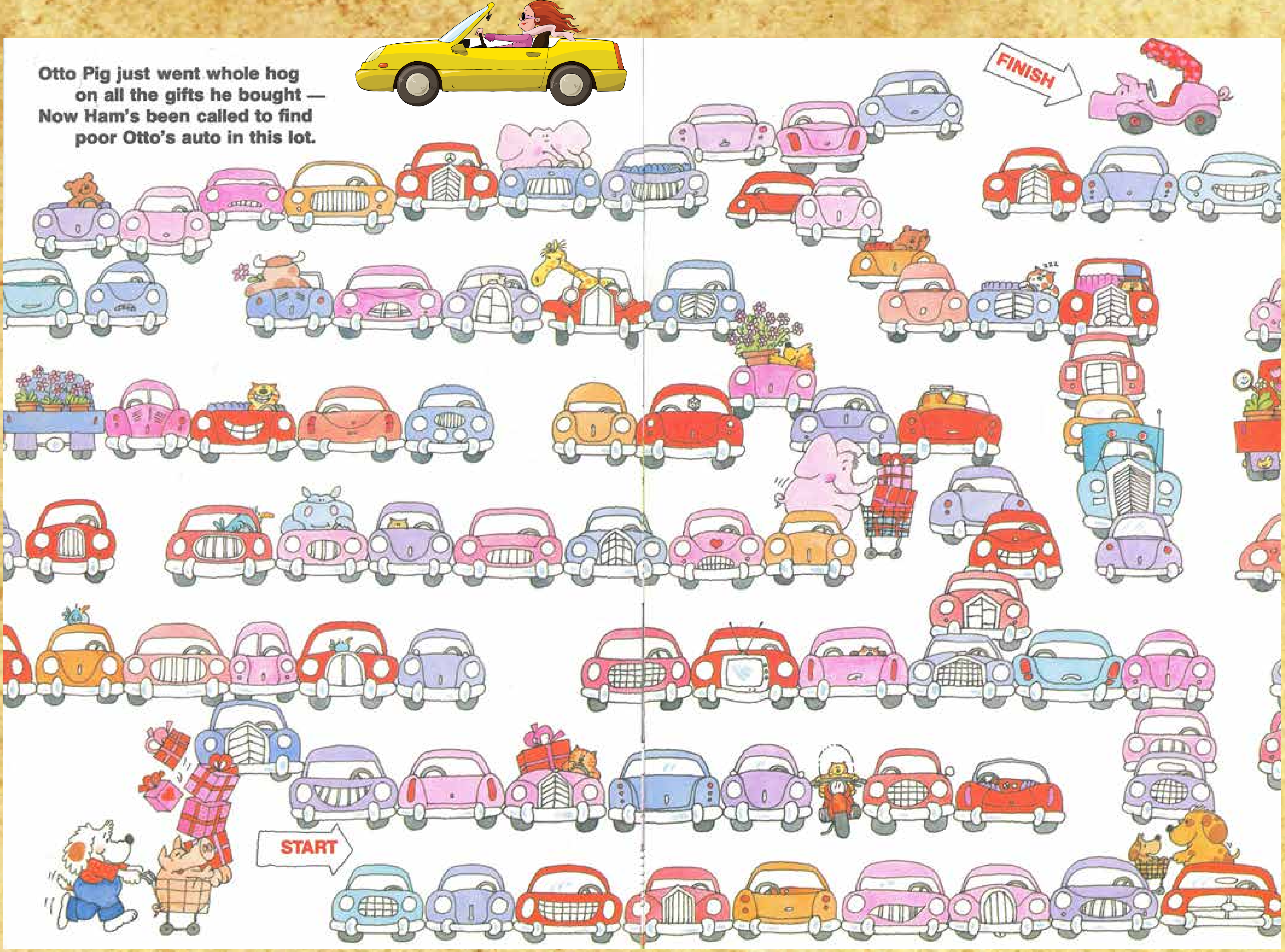
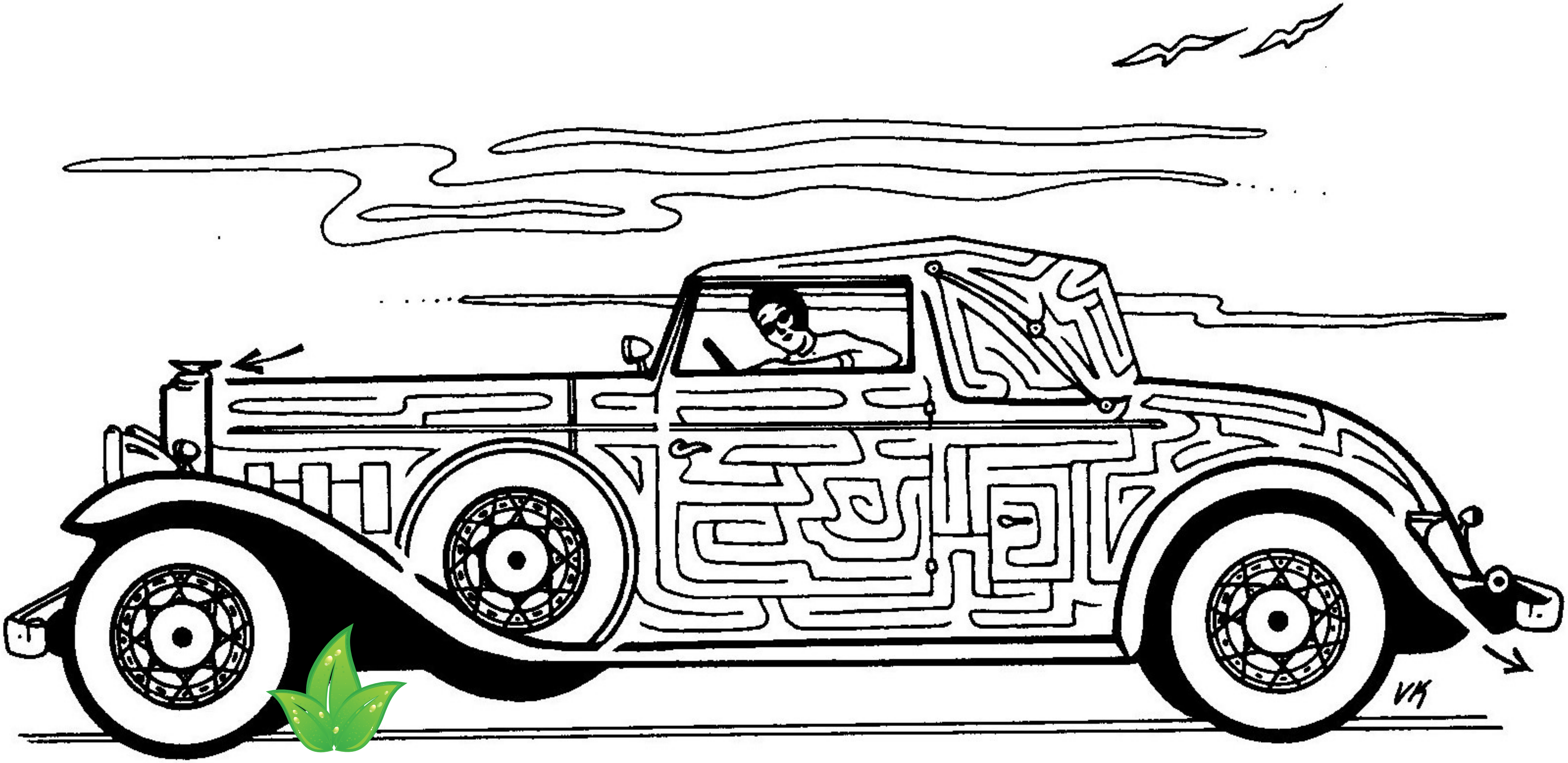
HORSEMOBILE
CONCEPT
FLORENCE
ADVERTISEMENT
INVENTOR
VALVE
FUTURA
BUICK
OIL
PONTIAC
RACING
WINDSHIELD
MOXIE
BATMOBILE
KEVLAR

Otto Pig just went whole hog
on all the gifts he bought —
Now Ham's been called to find
poor Otto's auto in this lot.




VK

FROM THE VIDEO GAMES YOU PLAY TO THE CEREAL YOU EAT, EVERY PRODUCT STARTS OUT AS AN IDEA (ALSO KNOWN AS A CONCEPT). Car companies often have new ideas for automotive styling and technology, and they want to show people how these new ideas can be used in cars. One way they do this is by creating a concept car.

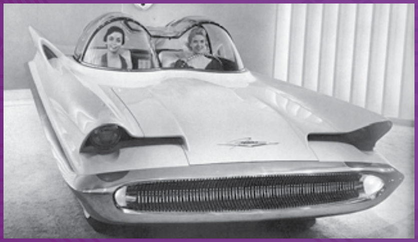
2014 Volkswagen Dune Beetle

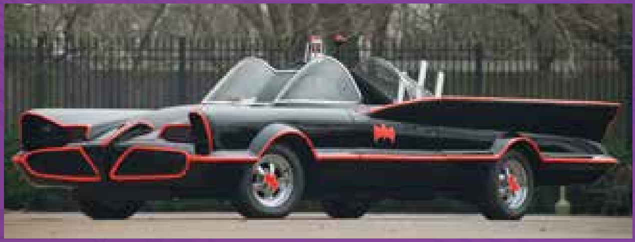
The car company builds its new ideas into concept car's design. Finished concept cars are often shown at big car shows. This lets the company see what people like and don't like about the car. If people are very happy with the car, there is a good chance the company will use some or most of the ideas in a future car.

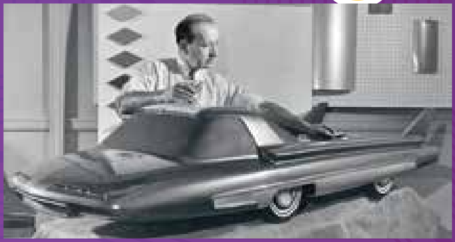
Because they are used to demonstrate new ideas, companies often only make one example for display. This makes them expensive to build. For example, Ford spent more than $250,000 in building the 1955 Lincoln Futura! Eventually, this car was transformed into the Batmobile for the 1960s Batman TV show.

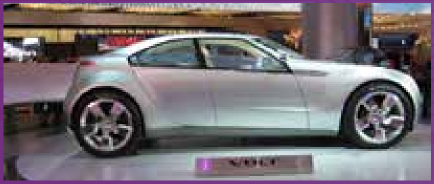
WHAT IS A CONCEPT CAR?

By: Matthew Hocker

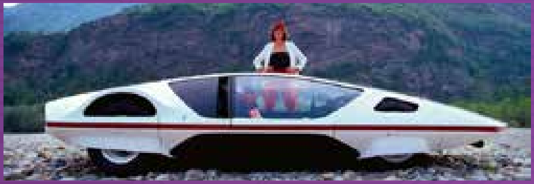

1955 Lincoln Futura

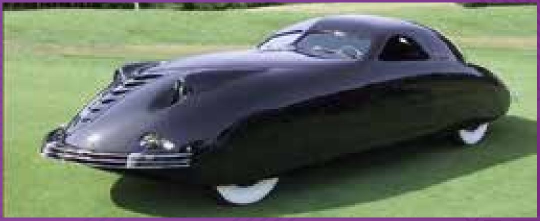

1955 Lincoln Futura as the 1966 Batmobile


1958 Ford Nucleon Scale Model

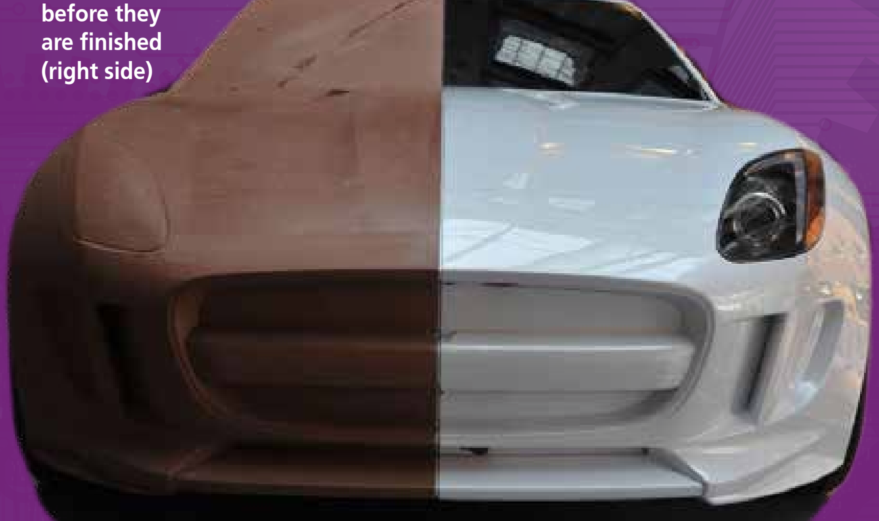


2007 Chevy Volt

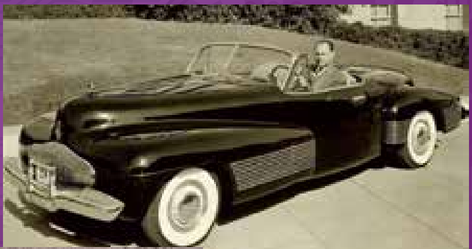

1970 Ferrari 512 S Modulo

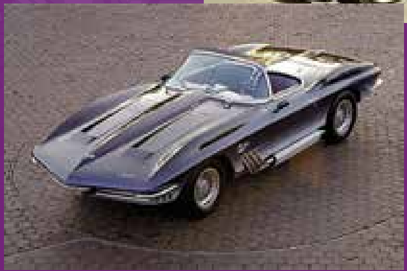

1938 Phantom Corsair

Concept cars are often first sculpted in clay (left side) before they are finished (right side)

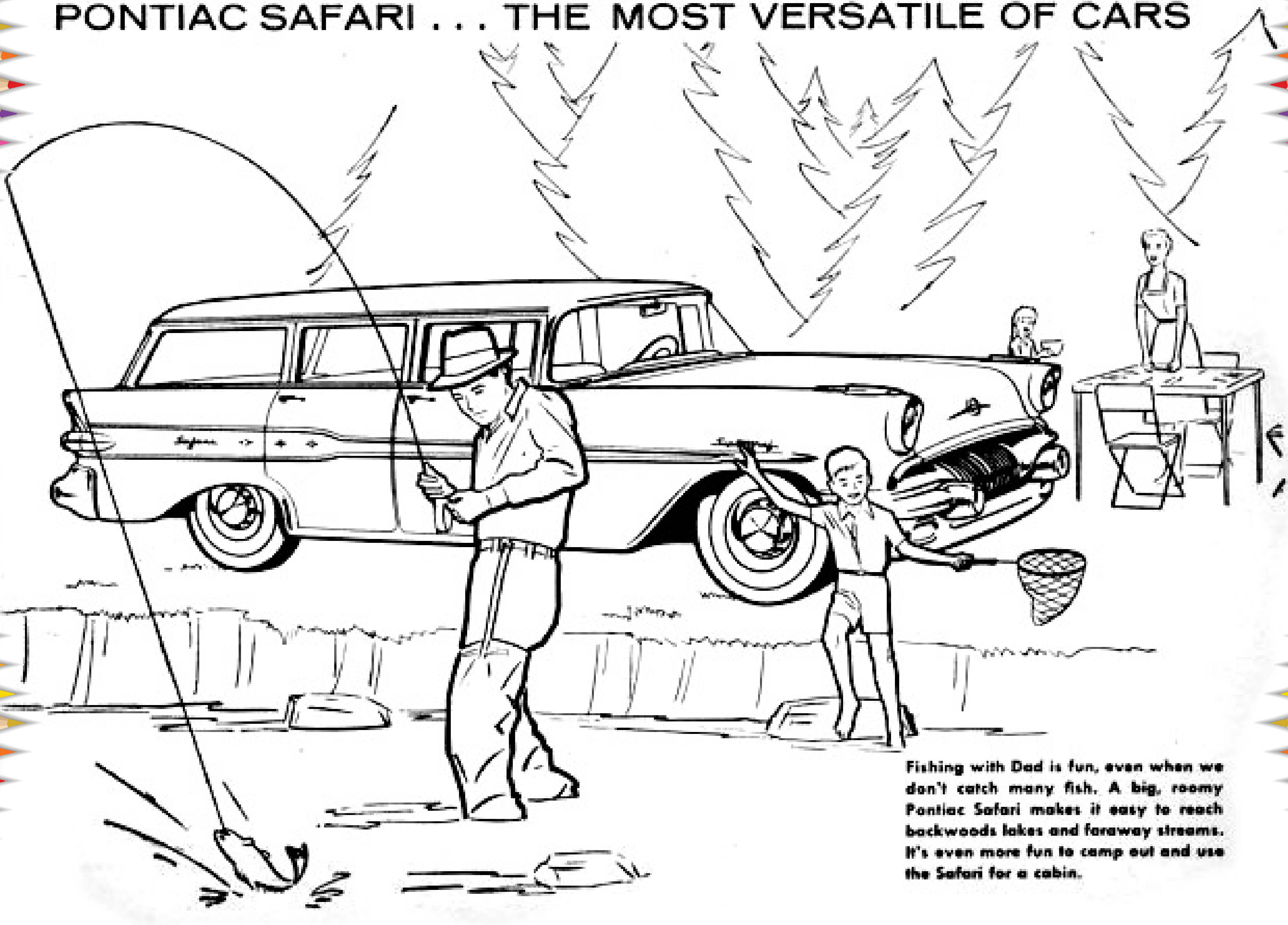


1938 Buick Y-Job




1961Corvette Mako Shark I

PONTIAC SAFARI . . . THE MOST VERSATILE OF CARS



Fishing with Dad is fun, even when we don't catch many fish. A big, roomy Pontiac Safari makes it easy to reach backwoods lakes and faraway streams. It's even more fun to camp out and use the Safari for a cabin.

EDITED AND PRODUCED BY:

Steve Moskowitz – AACA Executive Director
Matt Hocker – AACA Library & Research Center
Mike Reilly – AACA Library & Research Center
Yvonne Koons – Graphic Designer

CONTRIBUTORS: Matt Hocker
Warren H. Erb
Angelica Yost

Application for Membership

The Antique Automobile Club of America
501 W. Governor Road, P.O. Box 417, Hershey, PA 17033
(717)534-1910 • www.aaca.org

Name First M.I. Last

Address City State Zip Code

Signature Email Address Telephone

JUNIOR MEMBERSHIP (AGE UP THROUGH 12 YEARS OLD) . . . $10.00 per calendar year

Members receive quarterly newsletter, *Wheels*, button and badge. Date of Birth _______________ required for Juniors.

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